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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,961

07/31/2006

Yoshifumi Taoka

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JORDAN AND HAMBURG LLP
122 EAST 42ND STREET
SUITE 4000
NEW YORK, NY 10168

EXAMINER

ABRAHAM, TANIA

ART UNIT

PAPER NUMBER

3636

MAIL DATE

DELIVERY MODE

09/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,961	Applicant(s) TAOKA ET AL.	
	Examiner Tania Abraham	Art Unit 3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/2/09</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claim 2 is objected to because the claim should recite --the inertial mass— instead of “an inertial mass”, in line 5. Appropriate correction is required.

Claim 6 is objected to because the claim should recite --a front end-- instead of “the front end”, in line 7; and --the engagement portion-- instead of “an engagement portion”, in line 8. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taoka et al (WO02/066285) in view of Takada (US 4225178). Re claim 1, with reference to figures 10-12, Taoka et al teach a car seat comprising: a catching part (14)

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being disposed in a front part inside a seat cushion, said catching part extending in a widthwise direction of the seat cushion and arranged so as to be movable up and down; and an inertial force application mechanism (31), generally formed as a pivotable plate, that is activated by an inertial force acting directly on said catching part by the movement of a seat occupant at a time of rapid deceleration operable to move the catching part upward. Taoka et al fail to teach an inertial mass part disposed forward of the catching part and acted directly on by an inertial force. Takada teaches a car seat comprising a catching part formed as a forward portion of a seat plate (5) and an inertial force application mechanism comprising an inertial mass part (12) disposed forward of the catching part (5) that is activated by an inertial force acting directly on said inertial mass part by a coupling part (9) at a time of rapid deceleration operable to move the catching part upward. Takada teaches that it was old and well-known in the art at the time of invention to use an inertial mass part for operating a catching part at a forward end of a seat to prevent an occupant from "submarining" during sudden deceleration of the vehicle. So it would have been obvious to a person of ordinary skill in the art at the time of invention to modify Taoka et al's car seat with an inertial mass part to operate with the catching part, as taught by Takada, in order to improve Taoka et al's seat with a conventional yet effective means of activating a "submarining" prevention device.

Re claim 2, with reference to figure 8, Taoka et al teach the catching part (14) is supported by a reinforcing member (24a/b) inside the seat cushion such that it is swingable up and down around a pivot shaft (9b), and Takada teaches a pivot shaft (7), and the inertial mass part (12) coupled to and forward of the catching part (5) via a

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coupling part (9). Takada also shows a locking means located on the coupling part (9).

Takada shows that it was old and well-known in the art at the time of invention to use the inertial mass part connected to the catching part by a ratchet and pawl coupling device for activating a forward end of a seat during sudden deceleration to prevent an occupant from "submarining". Thus, the car seat of Taoka et al as modified by Takada would have: the catching part supported by a reinforcing member inside the seat cushion such that it is swingable up and down around a pivot shaft on a rear side of a vehicle relative to the pivot shaft; and the inertial force application mechanism including the inertial mass part, arranged forward of the catching part and the pivot shaft and above the pivot shaft, and a coupling part for connecting the inertial mass part and the catching part.

Re claim 3, Taoka et al teach a support spring member in Figure 8, but fail to teach coupling the catching part to the spring member with an elastic member. However, the coupling to the spring member is considered a matter of design choice since it appears that the apparatus would perform equally as well without being coupled to the seat's spring member.

Re claim 4, with reference to figure 12, Taoka et al teach a locking mechanism (18) configured to be operable for stopping downward movement of the catching part (14) that is moved upward by the inertial force during the rapid deceleration.

Re claim 10, with reference to figure 10, Taoka et al teach said catching part (14) includes a pipe material having a circular cross-section.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taoka et al and Takada as applied to claim 1 above, and further in view of Choi (US 6557935). Taoka et al and Takada teach the seat claimed, but fail to teach their catching part comprising a triangular cross-section. With reference to figure 1, Choi teaches a car seat comprising a catching part (20) disposed in a front part inside a seat cushion, extending in a widthwise direction of the cushion and arranged to move up and down; wherein the catching part includes a material having a triangular cross-section oriented such that a flat side of said triangular cross-section is parallel to an upper surface of the seat cushion in normal conditions. Because both Taoka et al, Takada and Choi teach a car seat cushion having a forwardly disposed catching part therein that is movable up and down, it would have been obvious to one skilled in the art to substitute one catching part for the other to achieve the predictable result of preventing the seat occupant from experiencing a "submarine" effect in the event of a collision.

Allowable Subject Matter

Claim 5 is allowed.

Claim 6 would be allowable if rewritten to overcome the objection(s) set forth in this Office action.

Claim 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the prior art of record fail to show or suggest, either singly or combined, a car seat comprising - a catching part as claimed coupled to an inertial mass part as claimed by a support member having an engagement portion that engages a locking member as claimed, the locking member always kept in biased contact with the support member.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

In response to applicant's argument (on pp. 9-10) that Taoka et al fail to teach an inertial force acts directly on the catching and inertial mass parts, the limitation "acting directly on" is considered broad enough to encompass the activation of the inertial force application means taught by Taoka et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania Abraham whose telephone number is 571-272-2635. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A./
Examiner, Art Unit 3636
September 14, 2009

/DAVID DUNN/
Supervisory Patent Examiner, Art Unit 3636